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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/804,871	03/19/2004	Albert S. Deutsch	PISCES 02.03	7645
27667	7590	08/29/2005	EXAMINER	
HAYES, SOLOWAY P.C. 130 W. CUSHING STREET TUCSON, AZ 85701			LE, HOA VAN	
			ART UNIT	PAPER NUMBER
			1752	
DATE MAILED: 08/29/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/804,871

Applicant(s)

DEUTSCH, ALBERT S.

Examiner

Hoa V. Le

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

This is in response to Papers filed on 10 and 13 June 2005.

This is in response to Papers filed on 10 and 13 June 2005.

- I. Information Disclosure Statement filed on 13 June 2005 has been considered.
- II. Applicant has amended the specification on page 1 to delete the priority requirement. Accordingly, USP 6,315,916 is now available as prior art. The Terminal Disclaimer over it filed 10 June 2005 has little value and is insufficient to remove it.
- III. The rejection using USP 6,315,916 is modified as followed:

Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Deutsch et al (6,315,916 as newly amended on page 1) considered in view of Mori (Pub. 2001/0010892 now Pat. 6,596,462), Damme et al (6,739,260), Thackeray et al (6,607,870), Meyrick et al (6,344,497), Tsuji et al (5,849,463), DeBoer et al (5,491,046) and Ehretsmam et al (3,847,265).

Deutsch et al disclose, teach and suggest to a process for imaging a printing plate having thereon a layer containing a diazo compound comprising the steps of jetting ink on the layer, heating and developing.

Deutsch et al do not specify a heating step using a near infrared emitter as that in claim 1. Mori et al at col.53:56-58 is cited to show the known use of a near infrared emitter energy heater to coagulate an ink-provided area on the layer as newly amended in claim 1.

Deutsch et al do not specify the embodiments of claims 5, 7, 10 and 14-16, please see Mori et al at col.21:64 with naphthoquinone containing a aromatic group to provide an absorption at 3.2-3.3 microns as those in the specification at page 11:17-18 and claim 5, 21:67 with thioamide with an amid group to provide an absorption at 5.7-61 microns as those in the instant application at page 11:19 and claim 7, 15:46-52 to show binder resin in part of claim 10, 22:22-23 with metal, carbon, graphite and metal oxide being known a ablative materials as that in claim 14, 30:65 to 31:9 to show the known near infrared absorption pigments as those in claims 15-16 for the advantages and efficiencies in using a near infrared heater.

Deutsch et al do not specify an additional washing or rinsing step using water after a developing step as that in claim 2. Damme et al at col.12 :65-66 is

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cited to show the known use of an additional washing or rinsing step to provide a sufficiently clean plate.

Deutsch et al do not specify (1) a dying step after wet development steps as that in claim 3, (2) novolac (novolak) and a latent bronsted acid as that in part of claim 9, (3) novolac (novolak) and naphthoquinone diazide sulfonic acid ester as that in claims 12. Thackeray et al at col.1:59-62 is cited to show the known use of novolac (novolak) and naphthoquinone diazide sulfonic acid ester as that in claims 12, col.6:42-51 and 8:24-47 is cited to show novolac (novolak) and a latent bronsted acid as that in part of claim 9 and at col.12:44-45 is cited to show a dying step after wet development steps as that in claim 3 for the advantage of obtaining read-to-use image.

Deutsch et al do not specify the embodiments of claims 4 and 6. Meyrick et al at col.7:25-37 is cited to show a pigment having (1) =NH group for an absorption at 2.2-3.2 microns as those in the instant application at page 11:16-17 and claim 4 and (2) aliphatic groups for an absorption in 3.33-3.55 microns as those in the instant application at page 11:18 and claim 6 for the advantages and efficiencies in using a near infrared heater.

Deutsch et al do not specify the embodiments of claims 8, part of 10 and 11. Tsuji et al at col.2:23-30 is cited to show the known polyazide or diazo resin or

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binder as those in part of claim 8 and claim 13, monomer as part of claim 11. It has a reason that at least some of Tsuji et al (1) monomers (on col.2 :36 to 3:29) are heat setting monomer as part of claim 10, (2) polymers (on col.3:35-4:52) are photo-crosslinkable polymers as other part of claim of 8 and (3) initiators (on col.4:57 to 5:12) are heat activated polymerization initiators as part of claim 11 for the advantages and efficiencies of forming a hardened polymer portion. The language “heat setting...”, “phot-crosslinkable...” or “heat activated polymerization initiator” is a property of a material. It is allowed to request and require applicant to provide a convincing evidence to the contrary in accordance with the authority stated in In re Schreiber, 44 USPQ2d 1429. An argument alone may have and be given a little to no value.

Deutsch et al and Mori do not specify resole and novolac resins and Bronsted acid as that in claim 9. DeBoer at col.3:44-45 is cited to show the known use of resole and novolac resins and a latent Bronsted acid in the art for the advantages of forming polymer layer.

Deutsch et al do not specify a heat setting monomer as in part of claim 10. Ehretsmam et al at col.3:61-63 is cite to show the known use of a heat setting monomer as a film forming agent or binder for the advantages of forming a stable shape.

Since the above references are all related to photo-reactive and -additive materials and processes of obtaining images of photolithographic printing plates, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use or cite the known washing or rinsing step after a developing step for a reasonable expectation of obtaining a clean plate as disclosed, taught and suggested in Damme et al, use or cite the known use of a drying step after aqueous development steps for a reasonable expectation of obtaining no water contamination to a hydrophobic ink and use or cite novolac resin and Bronsted acid for a reasonable expectation of obtaining a stable film forming layer and novolac and naphthoquinone diazide sulfonic acid ester for a reasonable expectation of obtaining a stable film forming layer as disclosed, taught and obtained in Thackeray et al, use or cite infrared absorption compounds for a reasonable expectations of obtaining the advantages and efficiencies in using a near infrared heater, use or cite diazo resins, photo-crosslinkable polymer, diazide and heat setting monomer binders for a reasonable expectation of obtaining a table film forming layer and use or cited a heat activated polymerization initiator for a reasonable expectation of a heat activating polymerization as disclose, taught and suggested in Tsuji et al, use or cite resole and novolac resins and latent Bronsted acid for a reasonable expectation of forming a stable film forming layer as

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disclosed, taught and suggested in DeBoer et al and use or cite heat setting monomer for a reasonable expectation or obtaining a stable film forming layer as disclosed, taught and suggested in Ehretsmam et al.

IV. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1, 5, 7, 10 and 14-16 rejected under 35 U.S.C. 102(a) as being anticipated by Mori (6,596,462) with Pub. 2001/0010892 being cumulative.

Mori discloses and teach a process for imaging a printing plate having thereon a layer containing a heat sensitive compound comprising the steps of jetting ink containing an infrared absorbing compound on the layer, heating step using a near infrared emitter and developing. Please see col.5:59 to 6:4 and 39-43, 15:46-52, 21:52 to 22:6 and 22-23, 30:5-15 and 64 to 31:9 and 53:56-58.

Since Mori discloses and teaches the above claimed embodiments, they are found to be anticipated by Mori et al.

V. Claims 2-4, 6, 8-9 and 10-13 are rejected under 35 U.S.C. 103(a) as being Mori (Pub. 2001/0010892 now Pat. 6,596,462), Damme et al (6,739,260),

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Thackeray et al (6,607,870), Meyrick et al (6,344,497), Tsuji et al (5,849,463), DeBoer et al (5,491,046) and Ehretsmam et al (3,847,265).

Mori discloses and teach a process for imaging a printing plate having thereon a layer containing a heat sensitive compound comprising the steps of jetting ink containing an infrared absorbing compound on the layer, heating step using a near infrared emitter and developing. Please see col.5:59 to 6:4 and 39-43, 15:46-52, 21:52 to 22:6 and 22-23, 30:5-15 and 64 to 31:9 and 53:56-58.

Deutsch et al and Mori do not specify an additional washing or rinsing step using water after a developing step as that in claim 2. Damme et al at col.12 :65-66 is cited to show the known use of an additional washing or rinsing step to provide a sufficiently clean plate.

Deutsch et al and Mori do not specify (1) a dying step after wet development steps as that in claim 3, (2) novolac (novolak) and a latent bronsted acid as that in part of claim 9, (3) novolac (novolak) and naphthoquinone diazide sulfonic acid ester as that in claims 12. Thackeray et al at col.1:59-62 is cited to show the known use of novolac (novolak) and naphthoquinone diazide sulfonic acid ester as that in claims 12, col.6:42-51 and 8:24-47 is cited to show novolac (novolak) and a latent bronsted acid as that in part of claim 9 and at col.12:44-45 is cited to show a dying

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step after wet development steps as that in claim 3 for the advantage of obtaining read-to-use image.

Deutsch et al and Mori do not specify the embodiments of claims 4 and 6. Meyrick et al at col.7:25-37 is cited to show a pigment having (1) =NH group for an absorption at 2.2-3.2 microns as those in the instant application at page 11:16-17 and claim 4 and (2) aliphatic groups for an absorption in 3.33-3.55 microns as those in the instant application at page 11:18 and claim 6 for the advantages and efficiencies in using a near infrared heater.

Deutsch et al and Mori do not specify the embodiments of claims 8 and 13, part of 10, 11. Tsuji et al at col.2:23-30 is cited to show the known polyazide or diazo resin or binder as those in part of claim 8 and claim 13, monomer as part of claim 11. It has a reason that at least some of Tsuji et al (1) monomers (on col.2 :36 to 3:29) are heat setting monomer as part of claim 10, (2) polymers (on col.3:35-4:52) are photo-crosslinkable polymers as other part of claim of 8 and (3) initiators (on col.4:57 to 5:12) are heat activated polymerization initiators as part of claim 11 for the advantages and efficiencies of forming a hardened polymer portion. The language "heat setting...", "phot-crosslinkable..." or "heat activated polymerization initiator" is a property of a material. It is allowed to request and require applicant to provide a convincing evidence to the contrary in accordance

with the authority stated in *In re Schreiber*, 44 USPQ2d 1429. An argument alone may have and be given a little to no value.

Deutsch et al and Mori do not specify resole and novolac resins and Bronsted acid as that in claim 9. DeBoer at col.3:44-45 is cited to show the known use of resole and novolac resins and a latent Bronsted acid in the art for the advantages of forming polymer layer.

Deutsch et al and Mori do not specify a heat setting monomer as in part of claim 10. Ehretsmam et al at col.3:61-63 is cite to show the known use of a heat setting monomer as a film forming agent or binder for the advantages of forming a stable shape.

Since the above references are all related to photo-reactive and -additive materials and processes of obtaining images of photolithographic printing plates, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use or cite the known washing or rinsing step after a developing step for a reasonable expectation of obtaining a clean plate as disclosed, taught and suggested in Damme et al, use or cite the known use of a drying step after aqueous development steps for a reasonable expectation of obtaining no water contamination to a hydrophobic ink and use or cite novolac resin and Bronsted acid for a reasonable expectation of obtaining a stable film

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forming layer and novolac and naphthoquinone diazide sulfonic acid ester for a reasonable expectation of obtaining a stable film forming layer as disclosed, taught and obtained in Thackeray et al, use or cite infrared absorption compounds for a reasonable expectations of obtaining the advantages and efficiencies in using a near infrared heater, use or cite diazo resins, photo-crosslinkable polymer, diazide and heat setting monomer binders for a reasonable expectation of obtaining a table film forming layer and use or cited a heat activated polymerization initiator for a reasonable expectation of a heat activating polymerization as disclose, taught and suggested in Tsuji et al, use or cite resole and novolac resins and latent Bronsted acid for a reasonable expectation of forming a stable film forming layer as disclosed, taught and suggested in DeBoer et al and use or cite heat setting monomer for a reasonable expectation or obtaining a stable film forming layer as disclosed, taught and suggested in Ehretsmam et al.

VI. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable Ma et al (5,292,556) considered in view of Mori (Pub. 2001/0010892 now Pat. 6,596,462), Damme et al (6,739,260), Thackeray et al (6,607,870), Meyrick et al (6,344,497), Tsuji et al (5,849,463), DeBoer et al (5,491,046) and Ehretsmam et al (3,847,265).

Ma et al disclose, teach and suggest to a process for imaging a printing plate having thereon a layer comprising the steps of jetting ink on the layer. Please see the whole disclosure of each of the applied references especially Ma et al col.2:3-11 and 9:39-64.

Ma et al disclose their layers being non-photosensitive but do not specify "heat sensitive" as that in claim 1. It is reasonable that at least some of Ma et al layers (on col.3:20 to 5:48) are heat sensitive. The language "heat sensitive" is a functional property of a material. It is allowed to request and require applicant to provide a convincing evidence to the contrary in accordance with the authority stated in *In re Schreiber*, 44 USPQ2d 1429. An argument alone may have and be given a little to no value.

Ma et al do not specify a heating step using a near infrared emitter as that in claim 1. Mori et al at col.53:56-58 is cited to show the known use of a near infrared emitter energy heater to coagulate an ink-provided area on the layer as newly amended in claim 1.

Ma et al do not specify the embodiments of claims 5, 7, 10 and 14-16, please see Mori et al at col.21:64 with naphthoquinone containing a aromatic group to provide an absorption at 3.2-3.3 microns as those in the specification at page 11:17-18 and claim 5, 21:67 with thioamide with an amid group to provide an

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absorption at 5.7-61 microns as those in the instant application at page 11:19 and claim 7, 15:46-52 to show binder resin in part of claim 10, 22:22-23 with metal, carbon, graphite and metal oxide being known as ablative materials as that in claim 14, 30:65 to 31:9 to show the known near infrared absorption pigments as those in claims 15-16 for the advantages and efficiencies in using a near infrared heater.

Ma et al do not specify an additional washing or rinsing step using water after a developing step as that in claim 2. Damme et al at col.12 :65-66 is cited to show the known use of an additional washing or rinsing step to provide a sufficiently clean plate.

Ma et al do not specify (1) a drying step after wet development steps as that in claim 3, (2) novolac (novolak) and a latent bronsted acid as that in part of claim 9, (3) novolac (novolak) and naphthoquinone diazide sulfonic acid ester as that in claims 12. Thackeray et al at col.1:59-62 is cited to show the known use of novolac (novolak) and naphthoquinone diazide sulfonic acid ester as that in claims 12, col.6:42-51 and 8:24-47 is cited to show novolac (novolak) and a latent bronsted acid as that in part of claim 9 and at col.12:44-45 is cited to show a drying step after wet development steps as that in claim 3 for the advantage of obtaining read-to-use image.

Ma et al do not specify the embodiments of claims 4 and 6. Meyrick et al at col.7:25-37 is cited to show a pigment having (1) =NH group for an absorption at 2.2-3.2 microns as those in the instant application at page 11:16-17 and claim 4 and (2) aliphatic groups for an absorption in 3.33-3.55 microns as those in the instant application at page 11:18 and claim 6 for the advantages and efficiencies in using a near infrared heater.

Ma et al do not specify the embodiments of claims 8, part of 10 and 11. Tsuji et al at col.2:23-30 is cited to show the known polyazide or diazo resin or binder as those in part of claim 8 and claim 13, monomer as part of claim 11. It has a reason that at least some of Tsuji et al (1) monomers (on col.2 :36 to 3:29) are heat setting monomer as part of claim 10, (2) polymers (on col.3:35-4:52) are photo-crosslinkable polymers as other part of claim of 8 and (3) initiators (on col.4:57 to 5:12) are heat activated polymerization initiators as part of claim 11 for the advantages and efficiencies of forming a hardened polymer portion. The language “heat setting...”, “phot-crosslinkable...” or “heat activated polymerization initiator” is a property of a material. It is allowed to request and require applicant to provide a convincing evidence to the contrary in accordance with the authority stated in In re Schreiber, 44 USPQ2d 1429. An argument alone may have and be given a little to no value.

Ma et al do not specify resole and novolac resins and Bronsted acid as that in claim 9. DeBoer at col.3:44-45 is cited to show the known use of resole and novolac resins and a latent Bronsted acid in the art for the advantages of forming polymer layer.

Ma et al do not specify a heat setting monomer as in part of claim 10. Ehretsmam et al at col.3:61-63 is cite to show the known use of a heat setting monomer as a film forming agent or binder for the advantages of forming a stable shape.

Since the above references are all related to photo-reactive and -additive materials and processes of obtaining images of photolithographic printing plates, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use or cite the known washing or rinsing step after a developing step for a reasonable expectation of obtaining a clean plate as disclosed, taught and suggested in Damme et al, use or cite the known use of a drying step after aqueous development steps for a reasonable expectation of obtaining no water contamination to a hydrophobic ink and use or cite novolac resin and Bronsted acid for a reasonable expectation of obtaining a stable film forming layer and novolac and naphthoquinone diazide sulfonic acid ester for a reasonable expectation of obtaining a stable film forming layer as disclosed, taught

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and obtained in Thackeray et al, use or cite infrared absorption compounds for a reasonable expectations of obtaining the advantages and efficiencies in using a near infrared heater, use or cite diazo resins, photo-crosslinkable polymer, diazide and heat setting monomer binders for a reasonable expectation of obtaining a table film forming layer and use or cited a heat activated polymerization initiator for a reasonable expectation of a heat activating polymerization as disclose, taught and suggested in Tsuji et al, use or cite resole and novolac resins and latent Bronsted acid for a reasonable expectation of forming a stable film forming layer as disclosed, taught and suggested in DeBoer et al and use or cite heat setting monomer for a reasonable expectation or obtaining a stable film forming layer as disclosed, taught and suggested in Ehretsmam et al.

VII. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable Arimatsu et al (5,312,654) considered in view of Mori (Pub. 2001/0010892 now Pat. 6,596,462), Damme et al (6,739,260), Thackeray et al (6,607,870), Meyrick et al (6,344,497), Tsuji et al (5,849,463), DeBoer et al (5,491,046) and Ehretsmam et al (3,847,265).

Arimatsu et al disclose, teach and suggest to a process for imaging a printing plate having thereon a layer comprising the steps of jetting ink on the layer. Please

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see the whole disclosure of each of the applied references especially Arimatsu et al col.2:10-14 and 8:22-31.

Arimatsu et al do not specify a heating step using a near infrared emitter as that in claim 1. Mori et al at col.53:56-58 is cited to show the known use of a near infrared emitter energy heater to coagulate an ink-provided area on the layer as newly amended in claim 1.

Arimatsu et al do not specify the embodiments of claims 5, 7, 10 and 14-16, please see Mori et al at col.21:64 with naphthoquinone containing a aromatic group to provide an absorption at 3.2-3.3 microns as those in the specification at page 11:17-18 and claim 5, 21:67 with thioamide with an amid group to provide an absorption at 5.7-61 microns as those in the instant application at page 11:19 and claim 7, 15:46-52 to show binder resin in part of claim 10, 22:22-23 with metal, carbon, graphite and metal oxide being known a ablative materials as that in claim 14, 30:65 to 31:9 to show the known near infrared absorption pigments as those in claims 15-16 for the advantages and efficiencies in using a near infrared heater.

Arimatsu et al do not specify an additional washing or rinsing step using water after a developing step as that in claim 2. Damme et al at col.12 :65-66 is cited to show the known use of an additional washing or rinsing step to provide a sufficiently clean plate.

Arimatsu et al do not specify (1) a dying step after wet development steps as that in claim 3, (2) novolac (novolak) and a latent bronsted acid as that in part of claim 9, (3) novolac (novolak) and naphthoquinone diazide sulfonic acid ester as that in claims 12. Thackeray et al at col.1:59-62 is cited to show the known use of novolac (novolak) and naphthoquinone diazide sulfonic acid ester as that in claims 12, col.6:42-51 and 8:24-47 is cited to show novolac (novolak) and a latent bronsted acid as that in part of claim 9 and at col.12:44-45 is cited to show a dying step after wet development steps as that in claim 3 for the advantage of obtaining read-to-use image.

Arimatsu et al do not specify the embodiments of claims 4 and 6. Meyrick et al at col.7:25-37 is cited to show a pigment having (1) =NH group for an absorption at 2.2-3.2 microns as those in the instant application at page 11:16-17 and claim 4 and (2) aliphatic groups for an absorption in 3.33-3.55 microns as those in the instant application at page 11:18 and claim 6 for the advantages and efficiencies in using a near infrared heater.

Arimatsu et al do not specify the embodiments of claims 8, part of 10 and 11. Tsuji et al at col.2:23-30 is cited to show the known polyazide or diazo resin or binder as those in part of claim 8 and claim 13, monomer as part of claim 11. It has a reason that at least some of Tsuji et al (1) monomers (on col.2 :36 to 3:29) are

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heat setting monomer as part of claim 10, (2) polymers (on col.3:35-4:52) are photo-crosslinkable polymers as other part of claim of 8 and (3) initiators (on col.4:57 to 5:12) are heat activated polymerization initiators as part of claim 11 for the advantages and efficiencies of forming a hardened polymer portion. The language “heat setting...”, “phot-crosslinkable...” or “heat activated polymerization initiator” is a property of a material. It is allowed to request and require applicant to provide a convincing evidence to the contrary in accordance with the authority stated in *In re Schreiber*, 44 USPQ2d 1429. An argument alone may have and be given a little to no value.

Arimatsu et al do not specify resole and novolac resins and Bronsted acid as that in claim 9. DeBoer at col.3:44-45 is cited to show the known use of resole and novolac resins and a latent Bronsted acid in the art for the advantages of forming polymer layer.

Arimatsu et al do not specify a heat setting monomer as in part of claim 10. Ehretsmam et al at col.3:61-63 is cite to show the known use of a heat setting monomer as a film forming agent or binder for the advantages of forming a stable shape.

Since the above references are all related to photo-reactive and -additive materials and processes of obtaining images of photolithographic printing plates, it

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would have been obvious to one having ordinary skill in the art at the time the invention was made to use or cite the known washing or rinsing step after a developing step for a reasonable expectation of obtaining a clean plate as disclosed, taught and suggested in Damme et al, use or cite the known use of a drying step after aqueous development steps for a reasonable expectation of obtaining no water contamination to a hydrophobic ink and use or cite novolac resin and Bronsted acid for a reasonable expectation of obtaining a stable film forming layer and novolac and naphthoquinone diazide sulfonic acid ester for a reasonable expectation of obtaining a stable film forming layer as disclosed, taught and obtained in Thackeray et al, use or cite infrared absorption compounds for a reasonable expectations of obtaining the advantages and efficiencies in using a near infrared heater, use or cite diazo resins, photo-crosslinkable polymer, diazide and heat setting monomer binders for a reasonable expectation of obtaining a table film forming layer and use or cited a heat activated polymerization initiator for a reasonable expectation of a heat activating polymerization as disclose, taught and suggested in Tsuji et al, use or cite resole and novolac resins and latent Bronsted acid for a reasonable expectation of forming a stable film forming layer as disclosed, taught and suggested in DeBoer et al and use or cite heat setting

monomer for a reasonable expectation or obtaining a stable film forming layer as disclosed, taught and suggested in Ehretsmam et al.

VIII. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable Furukawa (5,695,908) considered in view of Mori (Pub. 2001/0010892 now Pat. 6,596,462), Damme et al (6,739,260), Thackeray et al (6,607,870), Meyrick et al (6,344,497), Tsuji et al (5,849,463), DeBoer et al (5,491,046) and Ehretsmam et al (3,847,265).

Furukawa discloses, teaches and suggests to a process for imaging a printing plate having thereon a layer comprising the steps of jetting ink on the layer. Please see the whole disclosure of each of the applied references especially Furukawa at col.21:34-42.

Furukawa does not specify "heat sensitive" as that in claim 1. It is reasonable that at least some of Furukawa layers (on col.3:57 to 10:56 and polymers P(1-8 on cols.15-18) are heat sensitive. The language "heat sensitive" is a functional property of a material. It is allowed to request and require applicant to provide a convincing evidence to the contrary in accordance with the authority stated in In re Schreiber, 44 USPQ2d 1429. An argument alone may have and be given a little to no value.

Furukawa does not specify a heating step using a near infrared emitter as that in claim 1. Mori et al at col.53:56-58 is cited to show the known use of a near infrared emitter energy heater to coagulate an ink-provided area on the layer as newly amended in claim 1.

Furukawa does not specify the embodiments of claims 5, 7, 10 and 14-16, please see Mori et al at col.21:64 with naphthoquinone containing a aromatic group to provide an absorption at 3.2-3.3 microns as those in the specification at page 11:17-18 and claim 5, 21:67 with thioamide with an amid group to provide an absorption at 5.7-61 microns as those in the instant application at page 11:19 and claim 7, 15:46-52 to show binder resin in part of claim 10, 22:22-23 with metal, carbon, graphite and metal oxide being known a ablative materials as that in claim 14, 30:65 to 31:9 to show the known near infrared absorption pigments as those in claims 15-16 for the advantages and efficiencies in using a near infrared heater.

Furukawa does not specify an additional washing or rinsing step using water after a developing step as that in claim 2. Damme et al at col.12 :65-66 is cited to show the known use of an additional washing or rinsing step to provide a sufficiently clean plate.

Furukawa does not specify (1) a dying step after wet development steps as that in claim 3, (2) novolac (novolak) and a latent bronsted acid as that in part of

claim 9, (3) novolac (novolak) and naphthoquinone diazide sulfonic acid ester as that in claims 12. Thackeray et al at col.1:59-62 is cited to show the known use of novolac (novolak) and naphthoquinone diazide sulfonic acid ester as that in claims 12, col.6:42-51 and 8:24-47 is cited to show novolac (novolak) and a latent bronsted acid as that in part of claim 9 and at col.12:44-45 is cited to show a dying step after wet development steps as that in claim 3 for the advantage of obtaining read-to-use image.

Furukawa does not specify the embodiments of claims 4 and 6. Meyrick et al at col.7:25-37 is cited to show a pigment having (1) =NH group for an absorption at 2.2-3.2 microns as those in the instant application at page 11:16-17 and claim 4 and (2) aliphatic groups for an absorption in 3.33-3.55 microns as those in the instant application at page 11:18 and claim 6 for the advantages and efficiencies in using a near infrared heater.

Furukawa does not specify the embodiments of claims 8, part of 10 and 11. Tsuji et al at col.2:23-30 is cited to show the known polyazide or diazo resin or binder as those in part of claim 8 and claim 13, monomer as part of claim 11. It has a reason that at least some of Tsuji et al (1) monomers (on col.2 :36 to 3:29) are heat setting monomer as part of claim 10, (2) polymers (on col.3:35-4:52) are photo-crosslinkable polymers as other part of claim of 8 and (3) initiators (on

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col.4:57 to 5:12) are heat activated polymerization initiators as part of claim 11 for the advantages and efficiencies of forming a hardened polymer portion. The language “heat setting...”, “phot-crosslinkable...” or “heat activated polymerization initiator” is a property of a material. It is allowed to request and require applicant to provide a convincing evidence to the contrary in accordance with the authority stated in *In re Schreiber*, 44 USPQ2d 1429. An argument alone may have and be given a little to no value.

Furukawa does not specify resole and novolac resins and Bronsted acid as that in claim 9. DeBoer at col.3:44-45 is cited to show the known use of resole and novolac resins and a latent Bronsted acid in the art for the advantages of forming polymer layer.

Furukawa does not specify a heat setting monomer as in part of claim 10. Ehretsmam et al at col.3:61-63 is cite to show the known use of a heat setting monomer as a film forming agent or binder for the advantages of forming a stable shape.

Since the above references are all related to photo-reactive and -additive materials and processes of obtaining images of photolithographic printing plates, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use or cite the known washing or rinsing step after a

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developing step for a reasonable expectation of obtaining a clean plate as disclosed, taught and suggested in Damme et al, use or cite the known use of a drying step after aqueous development steps for a reasonable expectation of obtaining no water contamination to a hydrophobic ink and use or cite novolac resin and Bronsted acid for a reasonable expectation of obtaining a stable film forming layer and novolac and naphthoquinone diazide sulfonic acid ester for a reasonable expectation of obtaining a stable film forming layer as disclosed, taught and obtained in Thackeray et al, use or cite infrared absorption compounds for a reasonable expectations of obtaining the advantages and efficiencies in using a near infrared heater, use or cite diazo resins, photo-crosslinkable polymer, diazide and heat setting monomer binders for a reasonable expectation of obtaining a table film forming layer and use or cited a heat activated polymerization initiator for a reasonable expectation of a heat activating polymerization as disclose, taught and suggested in Tsuji et al, use or cite resole and novolac resins and latent Bronsted acid for a reasonable expectation of forming a stable film forming layer as disclosed, taught and suggested in DeBoer et al and use or cite heat setting monomer for a reasonable expectation or obtaining a stable film forming layer as disclosed, taught and suggested in Ehretsmam et al.

VIII. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable Miyabi et al (5,852,975) considered in view of Mori (Pub. 2001/0010892 now Pat. 6,596,462), Damme et al (6,739,260), Thackeray et al (6,607,870), Meyrick et al (6,344,497), Tsuji et al (5,849,463), DeBoer et al (5,491,046) and Ehretsmam et al (3,847,265).

Miyabi et al disclose, teach and suggest to a process for imaging a printing plate having thereon a layer comprising the steps of jetting ink on the layer. Please see the whole disclosure of each of the applied references especially Miyabi et al col.2:44-51 and 7:5-7.

Miyabi et al disclose their layers being non-photosensitive but do not specify “heat sensitive” as that in claim 1. It is reasonable that at least some of Ma et al layers (on col.3:10-11, 4:20-29 and 6:1) are heat sensitive. The language “heat sensitive” is a functional property of a material. It is allowed to request and require applicant to provide a convincing evidence to the contrary in accordance with the authority stated in In re Schreiber, 44 USPQ2d 1429. An argument alone may have and be given a little to no value.

Miyabi et al do not specify a heating step using a near infrared emitter as that in claim 1. Mori et al at col.53:56-58 is cited to show the known use of a near

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infrared emitter energy heater to coagulate an ink-provided area on the layer as newly amended in claim 1.

Miyabi et al do not specify the embodiments of claims 5, 7, 10 and 14-16, please see Mori et al at col.21:64 with naphthoquinone containing a aromatic group to provide an absorption at 3.2-3.3 microns as those in the specification at page 11:17-18 and claim 5, 21:67 with thioamide with an amid group to provide an absorption at 5.7-61 microns as those in the instant application at page 11:19 and claim 7, 15:46-52 to show binder resin in part of claim 10, 22:22-23 with metal, carbon, graphite and metal oxide being known a ablative materials as that in claim 14, 30:65 to 31:9 to show the known near infrared absorption pigments as those in claims 15-16 for the advantages and efficiencies in using a near infrared heater.

Miyabi et al do not specify an additional washing or rinsing step using water after a developing step as that in claim 2. Damme et al at col.12 :65-66 is cited to show the known use of an additional washing or rinsing step to provide a sufficiently clean plate.

Miyabi et al do not specify (1) a dying step after wet development steps as that in claim 3, (2) novolac (novolak) and a latent bronsted acid as that in part of claim 9, (3) novolac (novolak) and naphthoquinone diazide sulfonic acid ester as that in claims 12. Thackeray et al at col.1:59-62 is cited to show the known use of

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novolac (novolak) and naphthoquinone diazide sulfonic acid ester as that in claims 12, col.6:42-51 and 8:24-47 is cited to show novolac (novolak) and a latent bronsted acid as that in part of claim 9 and at col.12:44-45 is cited to show a dying step after wet development steps as that in claim 3 for the advantage of obtaining read-to-use image.

Miyabi et al do not specify the embodiments of claims 4 and 6. Meyrick et al at col.7:25-37 is cited to show a pigment having (1) =NH group for an absorption at 2.2-3.2 microns as those in the instant application at page 11:16-17 and claim 4 and (2) aliphatic groups for an absorption in 3.33-3.55 microns as those in the instant application at page 11:18 and claim 6 for the advantages and efficiencies in using a near infrared heater.

Miyabi et al do not specify the embodiments of claims 8, part of 10 and 11. Tsuji et al at col.2:23-30 is cited to show the known polyazide or diazo resin or binder as those in part of claim 8 and claim 13, monomer as part of claim 11. It has a reason that at least some of Tsuji et al (1) monomers (on col.2 :36 to 3:29) are heat setting monomer as part of claim 10, (2) polymers (on col.3:35-4:52) are photo-crosslinkable polymers as other part of claim of 8 and (3) initiators (on col.4:57 to 5:12) are heat activated polymerization initiators as part of claim 11 for the advantages and efficiencies of forming a hardened polymer portion. The

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language “heat setting...”, “phot-crosslinkable...” or “heat activated polymerization initiator” is a property of a material. It is allowed to request and require applicant to provide a convincing evidence to the contrary in accordance with the authority stated in *In re Schreiber*, 44 USPQ2d 1429. An argument alone may have and be given a little to no value.

Miyabi et al do not specify resole and novolac resins and Bronsted acid as that in claim 9. DeBoer at col.3:44-45 is cited to show the known use of resole and novolac resins and a latent Bronsted acid in the art for the advantages of forming polymer layer.

Miyabi et al do not specify a heat setting monomer as in part of claim 10. Ehretsmam et al at col.3:61-63 is cite to show the known use of a heat setting monomer as a film forming agent or binder for the advantages of forming a stable shape.

Since the above references are all related to photo-reactive and -additive materials and processes of obtaining images of photolithographic printing plates, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use or cite the known washing or rinsing step after a developing step for a reasonable expectation of obtaining a clean plate as disclosed, taught and suggested in Damme et al, use or cite the known use of a

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drying step after aqueous development steps for a reasonable expectation of obtaining no water contamination to a hydrophobic ink and use or cite novolac resin and Bronsted acid for a reasonable expectation of obtaining a stable film forming layer and novolac and naphthoquinone diazide sulfonic acid ester for a reasonable expectation of obtaining a stable film forming layer as disclosed, taught and obtained in Thackeray et al, use or cite infrared absorption compounds for a reasonable expectations of obtaining the advantages and efficiencies in using a near infrared heater, use or cite diazo resins, photo-crosslinkable polymer, diazide and heat setting monomer binders for a reasonable expectation of obtaining a table film forming layer and use or cited a heat activated polymerization initiator for a reasonable expectation of a heat activating polymerization as disclose, taught and suggested in Tsuji et al, use or cite resole and novolac resins and latent Bronsted acid for a reasonable expectation of forming a stable film forming layer as disclosed, taught and suggested in DeBoer et al and use or cite heat setting monomer for a reasonable expectation or obtaining a stable film forming layer as disclosed, taught and suggested in Ehretsmam et al.

IX. Applicant's arguments filed 10 June 2005 have been fully considered but they are not persuasive.

Applicant amends and urges that the none of the applied references discloses, teaches or suggests “infrared absorption immobilization of an underlying coating” for the patentability of the claims. Mori et al at col.53:56-58 is cited to show the known use of a near infrared emitter energy heater to coagulate, cure, harden and/or immobilize an ink-provided portion of the under layer as newly amended in claim 1 for the advantage of hardening the portion of the ink-provided under layer. Other portion of the layer is removed or washed put in a developing steps to obtain a hardened negative image as disclosed by applicant in the instant application.

X. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoa V. Le whose telephone number is 571-272-1332. The examiner can normally be reached from 6:30 AM to 4:30 PM on Monday through Thursday and about the same time of most Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on 571-272-1526.

Applicants may file a paper by (1) fax with a central facsimile receiving number 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status

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information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hoa V. Le
Primary Examiner
Art Unit 1752

HVL
22 August 2005

HOA VAN LE
PRIMARY EXAMINER

A handwritten signature in cursive script that reads "Hoa Van Le".